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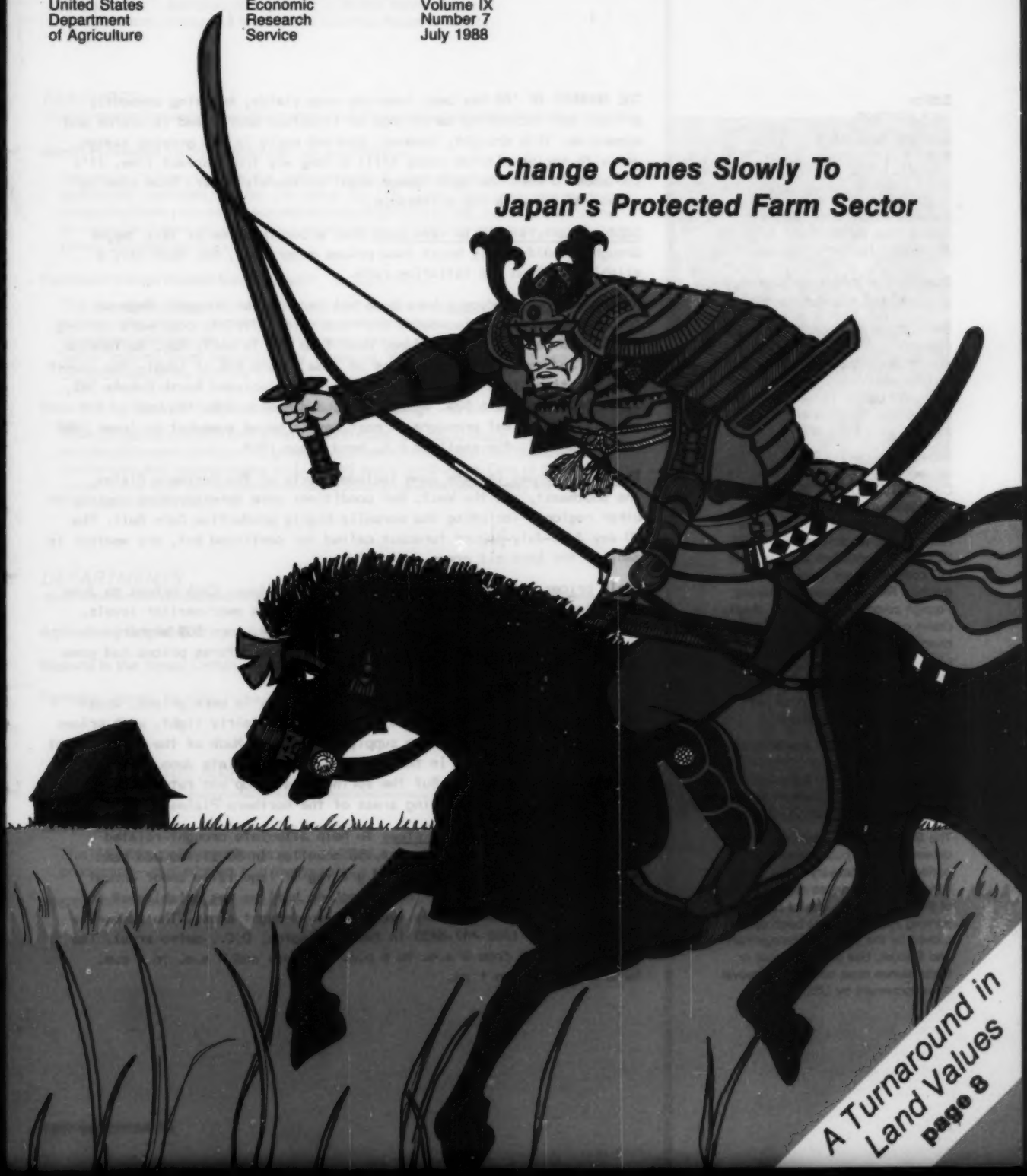
Change Comes Slowly To Japan's Protected Farm Sector



A Turnaround in Land Values page 8

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PERSPECTIVES

THE DROUGHT OF '88 has been lowering crop yields, boosting commodity prices, and increasing marketings of livestock where feed is scarce and expensive. This drought, however, started early in the growing season, and with spring-planted crops still a long way from harvest time, it's too soon to know how much damage might ultimately occur. Good soaking rains would make a big difference.

USDA economists said in late June that a continuation of this "major drought" would likely boost food prices moderately, but have only a slight effect on the inflation rate.

Many livestock producers have been hit hard by the drought. Reduced forage supplies have increased distress sales. Utility cows were selling for $37.50 per cwt. in mid-June, down from $50 in early May. Nationwide, pasture and range feed conditions on June 1 were 68% of ideal--the lowest June 1 rating since 1934. Some state ratings included North Dakota 38%, Texas 56%, Wisconsin 58%, Georgia 66%, and Kansas 76%. The one consolation is that pressure on pastures is eased somewhat by lower 1988 cattle numbers--the smallest U.S. herd since 1961.

The dryest areas in late June included parts of the Northern Plains, the Southeast, and the West. But conditions were deteriorating rapidly in other regions, including the normally highly productive Corn Belt. The 90-day June-July-August forecast called for continued hot, dry weather in many of the hard-hit areas.

Grain prices increased sharply during May and June. Cash prices on June 21 at leading markets were up substantially from year-earlier levels, with wheat 48% higher, grain sorghum 74% higher, corn 80% higher, soybeans 82% higher, and oats 144% higher. Some futures prices had gone up even more rapidly.

Corn stocks are large and this will limit gains in corn prices. Wheat stocks are not as plentiful and soybean stocks fairly tight, with prices of those crops reflecting the supply situations. Much of the winter wheat crop had been harvested in the Southern Plains by late June, with the crop rated fair to good. But the spring wheat crop was rated poor to very poor in the principal growing areas of the Northern Plains.

The USDA has taken several steps to help alleviate drought-related problems. As of June 27, about 1,450 counties in 30 states had been approved for emergency haying and grazing of land idled under annual commodity programs. A toll-free telephone hotline was established for questions about federal help available in drought areas. The number is 1-800-541-3375 (202-447-8455 in the Washington, D.C., metro area). The line is staffed from 8 a.m. to 6 p.m. weekdays and 9 a.m. to 1 p.m. Saturdays, Eastern time.

FARMLINE

AGRICULTURE . . . NATURAL RESOURCES . . . RURAL DEVELOPMENT
Practical economic intelligence from USDA's Economic Research Service

FEATURES

Japan Pressured To Open Markets *by Doug Martinez* 4

Japanese farmers receive the highest level of government assistance among developed countries, almost 2½ times the U.S. level. The Japanese system includes a heavy tax on consumers through high food prices. Japan's restrictions on imports of farm products have come under increasing pressure, and some policy changes are occurring.

Farmland Values Regain Some Ground *by Judith Foulke* 8

The average value of U.S. farmland showed a small increase in the latest national survey, after several years of falling land prices. Higher commodity prices and increased farm income are among the reasons for a more optimistic attitude about better returns from ownership of farmland. But economists still see many uncertainties in the outlook.

How Will Ag Markets Respond to Population Doubling? *by Eric Van Chantfort* 12

World population is now above the 5-billion mark, and could reach 11 billion by the middle of the next century. The growing numbers of mouths to feed represent both challenges and opportunities for U.S. and world agriculture. One of the crucial questions is how the underdeveloped countries will be able to pay for the food their people will need.

DEPARTMENTS

Agricultural Roundup: Sugar; Exports; Small Farms 14

Reports in the News: Cotton Insecticides; Ag Trade Statistics 17

Farmline Trends: Monthly Price Monitor; Leading Export Markets 18

SPECIAL IN THIS ISSUE:

Dairy Policy Dilemma: Stemming the Surpluses 10

The U.S. dairy policy challenge of the 1980's—to contain the rapid growth in milk production—is illustrated, and analyzed, in a special two-page centerfold.

Japan Pressured To Open Markets

Japan's industrial sector has become a pacesetter for the modern world, rising from the rubble of World War II to create, over the last few decades, technology-backed businesses that have earned the respect—even envy—of people in other nations.

And then there's Japanese agriculture, which draws a different kind of envy.

"Japanese farmers receive the highest level of government assistance among developed countries," says economist William Coyle of USDA's Economic Research Service. "The value to Japanese farmers of government intervention in agriculture, including direct payments and import quotas and bans, provided more than 70 percent of Japanese farm income in recent years."

That was almost 2½ times the level of government assistance in the United States and double that of EC nations in the 1982-86 period.

Coyle and his ERS colleague, economist Lois Caplan, recently examined Japanese agriculture and the state of U.S.-Japan agricultural trade.

In calculating the effects of government intervention in agriculture on both producers and consumers, Coyle says the results "confirm the common belief that Japanese farmers are heavily assisted and that Japanese consumers are heavily taxed through high food prices."

In GATT negotiations this year, Japan has already come under sharp scrutiny for its "protection" of an agricultural sector that is often inefficient, in the sense that its cost of producing food is much higher than in many other countries.

Among its various producers, rice farmers are singled out for particularly high levels of assistance, says Coyle.

"Because of the central role of rice in the Japanese diet, rice prices are supported by an almost total ban on imports and close regulation of domestic procurement and distribution," he says. Rice farmers are also assisted through input subsidies and other services, such as rural electrification, and research and extension.

Beef-Citrus Agreement Signed by Japan, U.S.

On June 20, as this issue of *Farmline* was being readied for press, Japan and the United States signed an agreement that will phase out Japanese quotas on imports of beef and citrus. (The stories on this page and the next 3 pages were prepared while negotiations were still under way, so they do not include information about the agreement.) Japan agreed to end its restrictions on beef and oranges in 3 years and on orange juice in 4 years. The pact allows the Japanese to impose tariffs on imports of these products for an additional 3 years.

This kind of large-scale, continuing role in agriculture occurs despite the ability of other countries to provide rice to Japan at competitive prices, says Coyle. Some evidence exists that American producers, for example, could supply large quantities of rice to the Japanese market for less than Japanese farmers, he notes.

Why Japan Persists

So why would Japan persist in supporting its farm sector to such an extent?

The reasons are rooted in politics—and war.

"Government measures to assist Japanese agriculture are not a new phenomenon," says Coyle. "They reflect an ongoing, deep-seated national concern about food security and stability of the food supply. This is not surprising for a heavily populated nation with limited agricultural resources and memories of severe food shortages during and after World War II."

Japan Provides Heavy Subsidies for Its Major Farm Commodities

Value of subsidies as a percent of farm income, 1982-86 average	
Wheat	97.8%
Barley	96.9%
Fluid milk	91.6%
Rice	88.2%
Soybeans	71.0%
Beef	59.0%

Figures from USDA's Economic Research Service.

That concern, he continues, is "given a political voice by the Liberal Democratic Party (LDP), which has been in power since 1955. The LDP derives much of its political strength from rural districts delineated after World War II, reflecting the predominantly rural character of Japan at the time. Other political parties support farm assistance, and many urban voters still have close family ties with rural areas and identify with rural issues."

He adds that "government assistance to Japanese agriculture rose rapidly after passage of the Basic Agricultural Law of 1961, which put new emphasis on raising farm income in light of swift productivity growth in the country's nonagricultural sector."

At the GATT talks, Japan has again stated its concerns over food security, saying that such needs can take precedence over the matter of reducing government intervention in agriculture. However, Japan has generally agreed with other GATT nations (at trade talks this year) that government supports should come down over time.

"And against their pattern of prolonged heavy support for agriculture," says Coyle, "there are recent signs that government assistance to agriculture may be waning. The key support price for rice was frozen in 1984, and reduced by 6 percent in 1987. The support prices for other important commodities have also remained frozen or have been reduced in recent years."

Along with rice and two other food grains (wheat and barley), the Japanese government heavily assists in the production of fluid milk and dairy products. Receiving intermediate levels of assistance are beef, pork, soybean, sugarcane, and sugar beet producers. And poultry and citrus producers are assisted at more moderate levels.

Restrictions on Imports

Most government assistance in Japan comes in the form of restrictions on imports, ranging from outright bans and import quotas to tariffs and state trading (where the government acts as importer and price-setter).

"One of the principal state-trading operations is the Japanese Food Agency, which controls the purchase and marketing of domestic and imported rice, wheat, and barley," says Coyle.

The Food Agency sets the producer rice price and guarantees the purchase, by the government, of all domestically produced rice at attractive prices.

Another state-trading arm—the Livestock Industry Promotion Corporation (LIPC)—was established in the early 1960's to stabilize livestock prices. "The LIPC's most important and direct involvement is in the dairy and beef sectors, where it is involved in product procurement, storage, marketing, and trade. It directly controls imports of designated dairy products and most beef."

Other quotas are allocated to private trading companies, or end users, by the government, which sets the quotas each year.

Japanese farmers also benefit from so-called budgetary measures. Covered under this category are such items as diversion payments for rice producers who plant other crops, and deficiency payments to oilseed and dairy producers. Other forms of assistance include subsidized agricultural insurance for many crop and livestock activities, subsidies to farm pension plans, and land development programs.

High levels of assistance in Japan, says Coyle, are targeted at commodities in which Japan does not have a comparative advantage—rice, wheat, beef, and pork.

"Japan's relatively small land mass, with limited amounts of pasture, has made it difficult for beef producers to make their operations as efficient as those of poultry producers, who depend far less on land resources," says Coyle. "The shortage of land available for cattle raisers is partly the result of government policies, which have not encouraged significant farmland consolidation. At the same time, Japan's rice policy has channeled and maintained excess resources in rice production."

Like rice growers, he says, beef producers have been protected by the actions taken against beef imports—a 25-percent tariff, surcharges, and quota restrictions.

Facing a Firm Test

The special protections for agriculture, however, may be facing a firm test this year because of broader political pressures in Japan—and the restless stirrings of many Americans, including legislators, businessmen, and government officials, over the trade deficit with Japan.

It may simply be a matter of numbers, says Coyle. Japan may believe its more lucrative trade in nonfarm products, particularly cars, consumer electronics, and capital goods, is endangered by its refusal to open its agricultural markets to such products as U.S. beef and citrus fruit. That certainly seems possible given the likelihood that the U.S. Congress will continue to consider legislation to limit imports from countries that impose barriers to U.S. exports.

The political pressures on Japan to liberalize its quota system may also come from the international community. Even as bilateral U.S.-Japanese talks continue, the United States has taken the beef and citrus quota case to GATT, which can convene a special panel to review the matter and recommend action to resolve it. Some analysts have suggested that Japan would find the global focus very unwelcome—particularly if a GATT panel's findings go against the Japanese.

But Coyle cautions that any agreement—even one guaranteeing the elimination of beef and citrus quotas at the end of some transitional period—must be carefully examined before success is proclaimed.

(continued on next page)

High Retail Food Prices Are One Measure of the Costs of Japan's Farm Policies, As This Comparison Helps Illustrate[1]

	Tokyo	Washington
	Prices per pound ($U.S.)	
Sirloin steak, boneless	$21.82	$4.64
Broilers, whole	$2.67	88¢
Rice	$1.30	41¢
Flour	60¢	28¢
Sugar	80¢	32¢
Butter	$3.64	$2.09
Oranges	$1.91	59¢
Coffee	$10.78	$3.32

[1]USDA figures from a November 1987 survey. Averages of retail prices at randomly sampled supermarkets in each capital's metropolitan area.

Some Japanese proposals for a new accord with more open trade, Coyle explains, have included the imposition of tariffs on beef and citrus during the transition period to open trade—and after, as well.

"That would have a trade-inhibiting effect," he says. In other words, the practical effect of tariffs could be high prices that would dampen demand by consumers. That could be nearly as effective in limiting U.S. exports as a quota itself. High prices already hold down demand for these items in Japan.

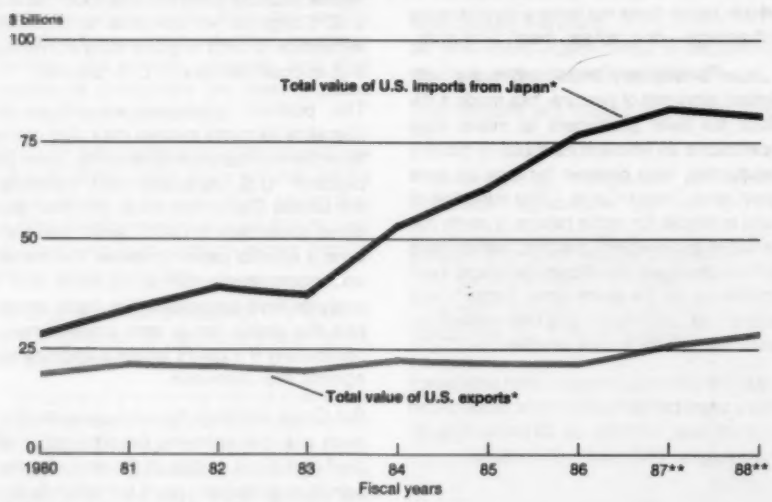
According to Coyle, Japan has three broad options in setting the future direction for its agricultural policy:

- Preserve the status quo of maintaining a small-scale, high-cost agriculture. This approach is considered unlikely because of the expected decline in the political power of farm groups, the increasing sway of Japan's export sector, and rising pressure from foreign food suppliers on Japan to open its markets.
- Go with a free trade approach. Although favored by some consumer groups and foreign interests, this course could lead to serious social dislocation costs for the Japanese. A rapid shift to free trade might prove intolerable and is also unlikely to occur.
- Take the way of moderation. Keeping to the middle of the road would mean the preservation of the nation's agricultural sector to the extent possible (by making that sector more efficient and competitive) while weaning it away from government protection and opening Japanese markets.

Japan is most likely to pursue this third course, but its concept of gradual liberalization may not be fast or far-reaching enough to meet the demands of its major trading partners. □

[*Based on information provided by economist William Coyle of the Agriculture and Trade Analysis Division, Economic Research Service.*]

Japan's Huge Trade Surplus With the United States Is Adding to the Pressures To Open Its Agricultural Markets



*All products (ag and non-ag). **1987 estimated, 1988 projected.

Beef and Citrus Typify Problems for U.S. Exports

Japan is the largest farm export market for the United States, but it could be a much larger one, according to many trade analysts.

The farm side of the U.S.-Japan trade relationship is easy to forget when looking at overall trade between the two nations, and finding that Japan regularly registers trade surpluses in the tens of billions of dollars with the United States.

Yet this very fact makes Japanese reluctance to open its markets to American farm products even harder for U.S. exporters to accept—and the dispute is especially contentious when it comes to beef and citrus products.

The dispute over beef and citrus import quotas in Japan is a long-standing one, and points up how Japan protects its small-scale and high-cost agriculture, says ERS economist William Coyle.

Typically, farms in Japan are less than 2½ acres in size, largely as the result of land tenure laws. Farming in Japan is also a part-time proposition for nearly 90 percent of its producers.

Beef may be the best example of how small-scale Japanese farming is. The average Japanese beef herd was just seven animals in 1986. The same year, according to official Japanese government statistics, there were 340,000 cattle producers in Japan.

Because of its desire to maintain "food security" and its memories of devastating food shortages in the wake of World War II, Japan probably views its agricultural policies as vital safeguards protecting a critical resource.

Many in the United States, including

government officials and exporters, have another opinion—that the quotas are symbolic of how Japan's markets are among the most restrictive of all developed countries.

More to the point, perhaps, is the practical matter of the estimated potential for American beef and citrus sales in a less restrictive Japanese market.

The issue came up in the last round of GATT trade talks (known as the Tokyo Round) and resulted in the Strauss-Ushiba Understanding (1979-1983), which provided for annual increases in beef and citrus quota levels.

After further negotiations, the U.S.-Japan beef and citrus agreement was signed in 1984. Under this accord, Japan agreed to expand its import quotas through March 1988 on fresh oranges, orange juice, and high-quality (grain-fed) beef, and to eliminate quotas on grapefruit juice by 1986. The Japanese quota for beef in its 1987 fiscal year (April 1987-March 1988) was 177,000 metric tons—of which 58,400 metric tons were high-quality beef. It was later expanded by 37,000 metric tons when the Japanese felt that domestic beef prices were rising too rapidly.

But the agreement expired at the end of March with the two parties deadlocked in disagreement. The U.S. position, detailed by the U.S. Trade Representative's Office, is that the agreement was an interim one leading to complete elimination of the quotas. The Japanese say that was never the intention of the agreement.

What would the specific impact of a liberalized, and thus larger, Japanese market be on U.S. beef exports?

Because beef prices are so high in Japan, consumption is estimated to be far below its potential level. Some studies show that complete liberalization of the Japanese beef market could lower the domestic price of beef by 30 to 75 percent, and could increase imports anywhere from two to three times. How much of this new demand would be filled by U.S. supplies would depend on such factors as the grade of U.S. beef and the price of Australian grass-fed beef imports.

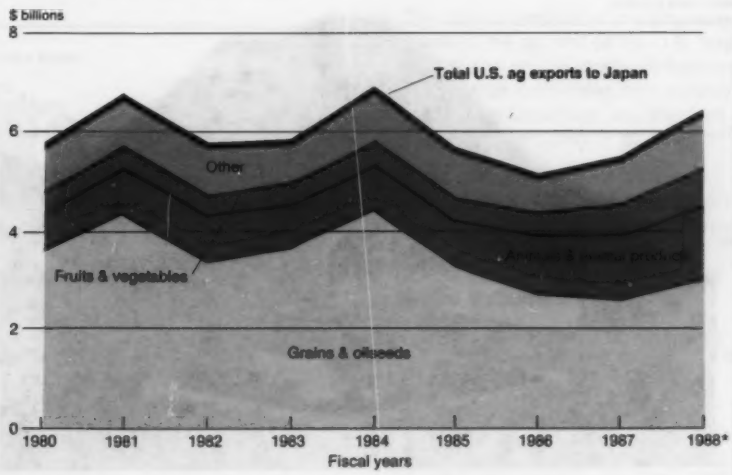
There are other things to consider as well. Eliminating beef quotas could affect the mix of import demand for other meats. Any large declines in beef prices could cut consumption and imports of pork and poultry. Then, again, the positive effect of these lower prices on disposable income might result in higher meat consumption overall.

The effect of changing the beef import quota might also extend to other commodities. If domestic beef producers could not compete with imports, Japanese imports of feed grains would fall. The U.S. Feed Grains Council has an answer if this were to occur: Barriers to feed grain imports in Japan should be eliminated as well, thereby decreasing input costs for Japanese meat producers and helping to make them more competitive. In addition, more feed grains would presumably be used in the United States in order to supply the larger volume of beef going to Japan.

In countering U.S. demands for a much freer market, Japan has said that the quotas provide a guarantee for some sales of high-quality U.S. beef in the Japanese market and that cheaper Australian grass-fed beef would dominate in an open market.

The U.S. response: Let open markets determine the suppliers, and we'll compete for our share. At the GATT talks in Geneva, American negotiators are trying to convince the Japanese that food security comes not through self-sufficiency achieved at any cost, but through stronger and freer trading relationships with other nations—nations producing the commodities in which they enjoy a comparative advantage.

Meats, Fruits and Vegetables, and Other High-Value Products Account for an Increasing Share of U.S. Agricultural Exports to Japan



*Projected.

Farmland Values Regain Some Ground

Iowa farmland was valued at $890 per acre in February 1988, less than half of what it was worth in the early 1980's. But the $890 value was good news for many Iowa farmers because it represented a turnabout—an increase of $142 an acre after 6 straight years of decline.

Not all the states recorded such large gains in farmland values this year, but 33 showed increases, and most of the others registered smaller drops in value than they did the previous year. Only five states, all in the West, showed bigger declines.

The average value of all U.S. farmland in February 1988 was $564 per acre, a 3-percent increase from a year earlier but still nearly one-third below the 1982 record of $823 an acre.

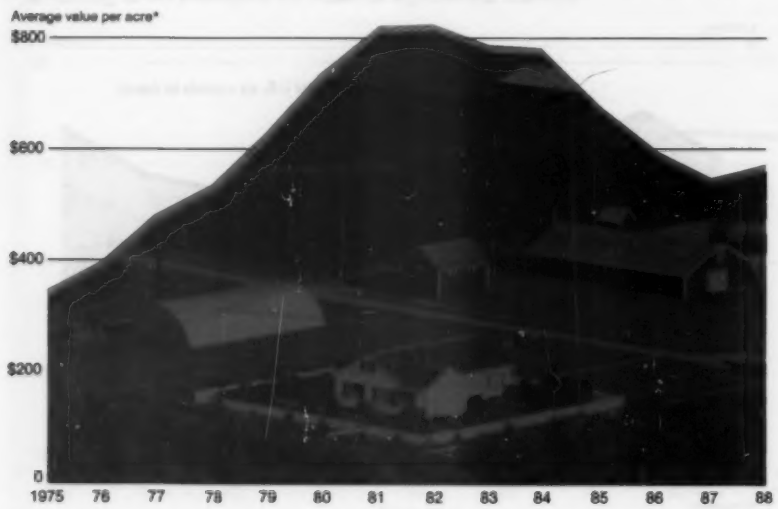
Analysts say that land values are an important measure of the health of the agricultural economy. The rise in this year's values, though less than the rate of inflation, provides a signal that investors apparently see an improved farm economy ahead.

Assumptions that future farmland values will continue rising should be guarded, say analysts.

John Reilly, an economist in USDA's Economic Research Service, says that the value of farmland depends on expectations of future economic conditions. "If many potential investors see a strengthening of the agricultural economy, they will bid up the price of land," Reilly says. "Agricultural exports, farm income, and commodity prices are important indicators. Interest rates and inflation also affect the value of land to the investor."

Last year, according to ERS analysts, farm income was at a record high, exports increased, and credit for buying land was more readily available. Buyers were often well-established farmers, and some paid cash.

Farmland Values Increased This Year for the First Time in 6 Years



*48 states, excluding Alaska and Hawaii.

The improved U.S. farm economy in 1987 enabled farmers to reduce their total debt to $141 billion, 27 percent below the 1983 peak of $193 billion. This raised optimism, which helped boost the total value of U.S. farm real estate by $17 billion from the 1987 total.

Declining land values since 1982 placed many farmers in a financial crunch, say ERS analysts. Between 1982 and 1987, the value of U.S. farm real estate declined $297 billion, most sharply in the Corn Belt and the Northern Plains, considerably lowering farmers' equity base. As land values declined, many borrowers were unable to pay existing obligations without restructuring their debts or selling assets. Even some farms with positive cash flows were considered poor credit risks because of low or negative equity positions.

But assumptions that future farmland values will continue rising should be guarded, says ERS economist Roger Hexem. He points out that some economic indicators that may have influenced farmland values last year could change this year. For instance, federal program payments were nearly 30 percent of net cash income in 1987. Federal payments are not likely to continue as high in the future, Hexem says. In addition, interest rates for farm real estate loans were lower in 1987 than a year earlier but have edged upward slightly since then.

Values Vary by Region

The largest gains in farmland values between February 1987 and February 1988 were in the Midwest, particularly Iowa and Minnesota. Values in Iowa dropped 11 percent between 1986 and 1987, but rose 19 percent between 1987 and 1988. Minnesota went from a 19-percent drop to a 14-percent gain. Reilly calls this a "readjustment," after farmland values in these states dropped more than in neighboring states.

Farmland values in the entire Corn Belt averaged 9 percent higher, after declining 10 percent from 1986 to 1987.

The Northeast's average value this February was up 9 percent from 1987, con-

tinuing a steady increase since the mid-1940's. In densely populated areas, competition from urban and nonagricultural uses of farmland increases the values. This explains Rhode Island's 48-percent increase and Connecticut's 21-percent increase, the economists say.

Farmland values, as of this past February, were up 6 percent in the Southeast and 2 percent in Appalachia, after no change and a 3-percent decline, respectively, the previous year.

A 4-percent drop in Louisiana's farmland values was offset by higher values in Mississippi and Arkansas, leaving the Delta states' average unchanged from the preceding year.

Part of the reason for the continued decline in Louisiana, as well as in the energy-producing states of Texas and Oklahoma, could be the continued effects of the drop in oil and natural gas prices in 1986, says Hexem. Depressed energy prices affected these states' economies, dampening the demand for land for urban and nonagricultural uses. Although these states showed a decrease between 1987 and 1988, values did not drop nearly as much as the previous year, when Louisiana showed a 27-percent decline, and Texas and Oklahoma each dropped 11 percent.

The Northern Plains averaged a 7-percent increase in land values after an 11-percent decrease the previous year. The Conservation Reserve Program, says Hexem, may be increasing values of lower quality cropland in several areas, including the Northern Plains and some Mountain states, particularly Colorado. The federal program makes payments to enrolled farmers for taking highly erodible cropland out of production.

Arizona and Nevada showed large declines in farmland values from February 1987 to February 1988. Arizona dropped 12 percent, while the previous year it was up 5 percent.

Farmland values in the Pacific states dropped 2 percent even though the region's farms had the largest increase in net cash income. But the drop was not nearly as severe as the previous year's 12 percent.

Future Values Uncertain

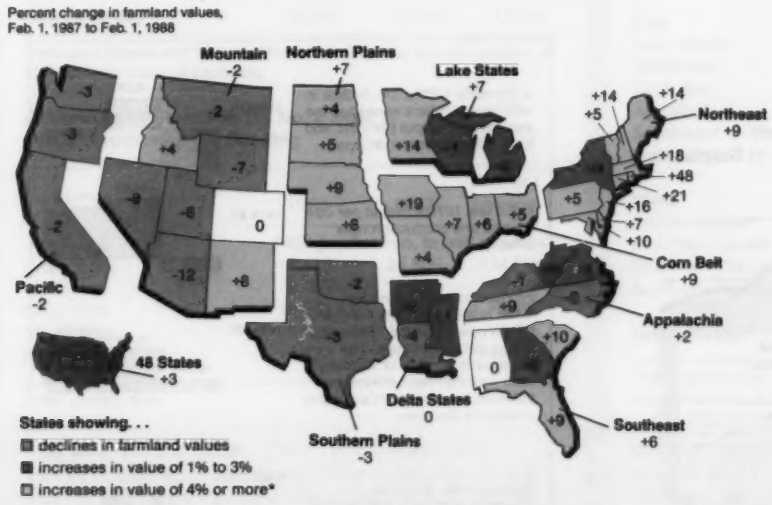
ERS economists see many uncertainties about future land values. The two most important factors may be exports and government farm programs. Recovery in exports, boosted by a falling dollar, is a healthy sign but potential buyers of farmland will be watching for any signs of policy changes, particularly as a 1990 farm bill begins to take shape. Proposals for liberalization of agricultural trade provide an added sense of uncertainty. Whether U.S. agriculture will gain, lose, or hold its current position is difficult to assess, the economists say.

Whatever the outcome, it will be reflected in land values.

ERS economists say that as long as farm sector conditions continue to improve, they expect land values to increase at roughly the rate of inflation. □

[Based primarily on information provided by economists John Reilly and Roger Hexem of the Resources and Technology Division, Economic Research Service.]

Values Are Up in 33 States, With Most of the Declines in the West



*In these states, increases in farmland values were equal to, or greater than, the U.S. inflation rate.

Foreigners Own Less Than 1% of U.S. Farmland

Foreign investments in U.S. farmland have not changed much. They still represent less than 1 percent of the nation's privately owned agricultural land.

The amount of U.S. farmland owned by foreign investors as of December 31, 1987, totaled 12.5 million acres, up by only 202,000 acres since December 1986.

Nearly 60 percent of the foreign-held acreage is owned by U.S. corporations in which foreign persons have a significant interest or substantial control. A little less than 8 percent of the total is owned by foreign individuals.

The largest amount of foreign-owned acreage, 14 percent of the U.S. total, is in Maine and is mostly timberland. Three large companies own most of it. Two are Canadian, and the third is a U.S. company that is partially foreign owned.

Most other foreign-held acreage is in the South (36 percent) and the West (34 percent). Rhode Island is the only state with no reported foreign-owned agricultural land.

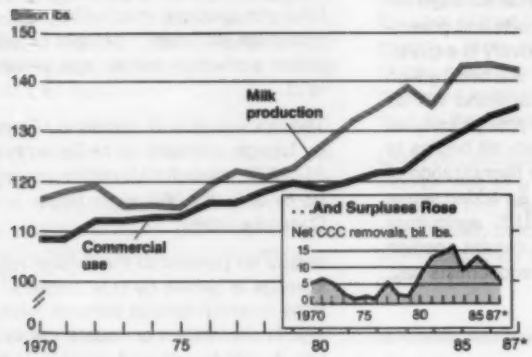
These and other findings are based on analysis by USDA's Economic Research Service of information gathered under the Agricultural Foreign Investment Disclosure Act of 1978. The foreign owners indicated that 93 percent of the acreage will remain in agricultural production.

Dairy Policy Dilemma of the 1980's: Stemming the Surpluses

Analysis and data were provided by economists James Miller and Sara Short of the Commodity Economics Division, Economic Research Service.

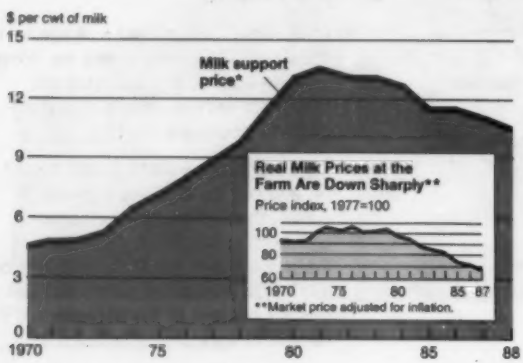
The dairy policy challenge of this decade has been to contain the rapid growth in milk production. To this end, increases in support prices were halted, and then reversed. Two major programs were implemented—the Dairy Diversion Program (Jan. 1, 1984 to March 31, 1985) and the Dairy Termination Program (April 1986 to August 1987). The temporary programs helped trim milk production in both 1984 and 1987, while accelerated gains in commercial use also contributed to surplus reduction. Government stocks on Dec. 31, 1987, fell to their lowest level since 1976. Nevertheless, both lawmakers and the dairy industry must still deal with the industry's continuing "propensity toward growing surpluses."

The Gap Between Milk Production and Commercial Use Widened Dramatically in the Early 1980's



*1987 preliminary.

Milk Support Prices Were Frozen—and Then Reduced—in an Effort To Stem the Growth in Surpluses

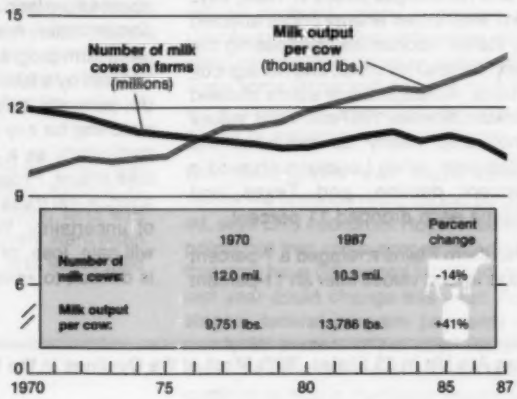


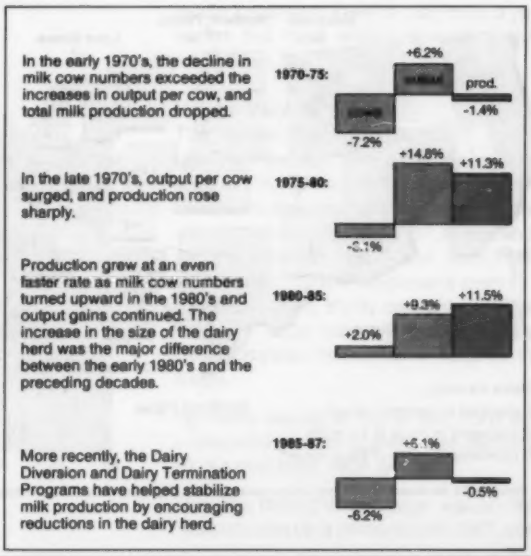
*Support price on January 1 of each year.

Rising productivity is one factor fueling the growth in milk production by reducing production costs, even as support levels and market prices decline. Productivity gains result either in lower costs per cow or higher milk output per cow.

Milk output per cow has trended upward for decades with heavier feeding of concentrates, the improved genetic potential of dairy herds, and better management. Increases in output per cow may accelerate in the decades ahead as a result of new technologies.

Cow Numbers Have Dropped 14% Since 1970, But Milk Output Per Cow Has Climbed 41%




In the early 1970's, the decline in milk cow numbers exceeded the increases in output per cow, and total milk production dropped.
1970-75:
+6.2%
prod.
-1.4%
-7.2%
In the late 1970's, output per cow surged, and production rose sharply.
1975-80:
+14.8%
+11.3%
-2.1%
Production grew at an even faster rate as milk cow numbers turned upward in the 1980's and output gains continued. The increase in the size of the dairy herd was the major difference between the early 1980's and the preceding decades.
1980-85:
+9.3%
+11.5%
+2.0%
More recently, the Dairy Diversion and Dairy Termination Programs have helped stabilize milk production by encouraging reductions in the dairy herd.
1985-87:
+5.1%
-0.5%
-6.2%

"If the late 1980's and the 1990's continue along the path of the early 1980's, the size of the dairy industry will continue to grow, and the threat of surpluses will persist."

Some productivity gains are more easily attained on large operations. Modern dairy buildings, improved milking equipment, and better forage storage require major capital outlays. Because of efficiencies of size in investment, these developments often favor larger herds. On the other hand, productivity gains resulting from management improvements are generally independent of size.

While the Number of Smaller Dairy Farms Is Shrinking, the Larger Scale Operations Are Multiplying

Number of farms with fewer than 20 milk cows		Number of farms with 100 or more milk cows	
1969	1982	1969	1982
402,022	116,199	11,029	19,674

Still another factor boosting milk production is the rapid development of the dairy sector in the West, where costs are relatively low.

Between 1970 and 1987, Output Per Cow Rose in All Regions, But Only Two Western Regions Registered Increases in Milk Cow Numbers

	1970	1987	Percent change
	Number of milk cows, in thousands		
East			
Lake states	3,196	2,979	-6.8%
Northeast	2,306	2,059	-10.7%
Corn Belt	1,814	1,299	-28.4%
Appalachia	1,044	708	-32.2%
Southeast	523	360	-31.2%
Delta states	440	224	-49.1%
West			
Pacific states[1]	1,043	1,312	+25.8%
Mountain states	454	510	+12.3%
Southern Plains	497	438	-11.9%
Northern Plains	682	448	-34.3%
United States[2]	12,000	10,334	-13.9%

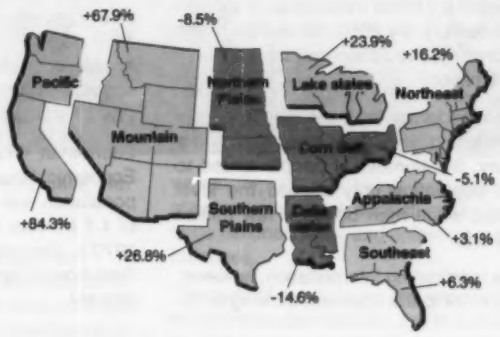
[1]Includes Alaska and Hawaii. [2]Regional data may not add exactly to U.S. total because of rounding.

California Now Ranks as the No. 2 State in Milk Production—And Growing

	1970	1987	Percent change
	Milk production, in mil. pounds[1]		
Wisconsin	18,435	24,800	+34.5%
California	9,457	17,934	+89.6%
New York	10,341	11,362	+9.9%
Minnesota	9,636	10,436	+8.3%
Pennsylvania	7,124	10,183	+42.9%

[1]1987 preliminary.

Changes in Milk Production, 1970-87



And the Largest Gains in Milk Production Were in the West

	1970	1987	Percent change
	Milk production, in mil. pounds[1]		
East			
Lake states	32,673	40,484	+23.9%
Northeast	24,224	28,139	+16.2%
Corn Belt	17,334	16,450	-5.1%
Appalachia	8,202	8,456	+3.1%
Southeast	4,151	4,413	+6.3%
Delta states	2,823	2,411	-14.6%
West			
Pacific states[2]	12,674	23,359	+84.3%
Mountain states	4,662	7,828	+67.9%
Southern Plains	4,315	5,470	+26.8%
Northern Plains	5,949	5,443	-8.5%
United States[3]	117,007	142,462	+21.8%

[1]1987 preliminary. [2]Includes Alaska and Hawaii. [3]Regional data may not add exactly to U.S. total because of rounding.

The analysts conclude: "If the trends of the early 1980's continue. . .reductions in the support price will likely be necessary to slow the growth in milk output per cow, to reduce milk cow numbers, and to accelerate expansion in commercial use. (But) if the support price is to stabilize prices without generating chronic large surpluses, mechanisms for setting the support price must be sufficiently flexible. . .to accommodate changes in industry conditions that could occur—not just to handle those now considered likely to occur."

How Will Ag Markets Respond To Population Doubling?

In 1987, world population broke the 5-billion mark. This year, it is expected to top 5.1 billion—growing at the rate of roughly 242,000 people per day, or 88 million a year.

That's a lot of new mouths to feed.

According to the latest projections by the U.S. Census Bureau, the world may have to support 6.2 billion inhabitants by the turn of the century. By 2050, the middle of the next century, population may be approaching 11 billion.

In historical terms, the prospective increase is staggering. In slightly more than half a century, the number of people added to world population may exceed the level reached since man began a few million years ago.

A less intimidating interpretation, however, might point to the apparent slowing in the rate of growth. It took just 38 years—from 1950 to 1988—for world population to double to its current level. The projections suggest that it may take more than 50 years for population to double again.

The population projections present both challenges and opportunities for U.S. and world agriculture.

Economist Francis Urban of USDA's Economic Research Service says world population was growing at an annual rate of 1.7 percent in the 1950's. In the early 1970's, the rate jumped to 2.0 percent. It then slowed, and is now back to about 1.7 percent.

He expects the slowing to continue. By the middle of the next century, the growth rate may be down to around 0.7 percent, based on the Census figures.

Urban says these projections consider such factors as the number of people in different age groups, as well as reproduction and death rates around the world. Recent famines, wars, and refugee movements are taken into account, but future developments of this sort cannot, of course, be anticipated.

Challenges and Opportunities

In examining the projections, Urban foresees both challenges and opportunities for world and U.S. agriculture. The major challenges, in his view, are not likely to stem from technological or resource constraints in feeding the huge population.

World Population Is Projected to More Than Double in the Next 60 Years, with Large Increases in Less Developed Regions and Slow-Growing or Declining Populations in Most Industrialized Nations

Population by region, in millions (000,000)

By 2050, the Combined Population of India and China May Exceed 1950's Total World Population

	Year			
	1950	1988	2000	2050
	population, in millions			
Selected countries[1]				
United States	152	246	268	299
Canada	14	26	28	29
West Germany	50	56	58	52
United Kingdom	50	57	58	51
USSR	180	286	312	366
Mexico	28	84	104	169
Brazil	53	151	185	288
Egypt	21	53	71	142
Iran	16	52	74	252
Ethiopia	21	48	71	244
Japan	84	123	129	115
China	563	1,088	1,242	1,565
India	370	817	1,013	1,591
Indonesia	83	184	227	380
Philippines	21	63	86	204

[1]selections include one or more countries from each of the major regions (except Oceania) and are not necessarily based on size of population.

[1]Central and South America combined (includes Mexico). [2]Includes China, Japan, Korea, Taiwan, etc. [3]Includes India, Pakistan, Indonesia, Philippines, Vietnam, etc. [4]Includes Egypt, Afghanistan, Turkey, Iran, Saudi Arabia, etc. [5]Includes Australia, New Zealand, Papua New Guinea, etc.

Historical data and projections were provided by ERS economists Francis Urban and Philip Rose from the population data bank of the U.S. Bureau of the Census.

"There is virtually no question in my mind that global agricultural production capacity will be sufficient to feed nearly 11 billion people," Urban says.

The more difficult question is how much of that capacity will be used, both here in the United States and in the rest of the world. The answer, he says, will depend primarily on economic development and incomes in the poorer, import-dependent nations with the largest and fastest growing populations.

One major problem area is Sub-Saharan Africa (the southern two-thirds of the African continent), a region already having great difficulty providing food for its people. The projections suggest that population in this area may more than quadruple over the next 60 years—from 506 million in 1988 to 2.3 billion by 2050.

According to Urban, population growth rates in Sub-Saharan Africa now exceed 3 percent per year and may rise a bit by the turn of the century. Rates are then expected to decline to about 1.7 percent by 2050.

"With its harsh climate and fragile soils, the region will remain heavily dependent on imports and food aid," he says.

Parts of the Mideast and the small republics of Central America also face potential problems, with rapid population growth and relatively poor prospects for a substantial improvement in agricultural productivity.

Overall, Asia and South America seem to be in better shape in terms of both economic and agricultural development to date. Nevertheless, population pressures—and Latin America's severe debt problems—are cause for some concern.

In Asia, India's population may nearly double from its current 817 million, possibly making it the most populous nation on earth by the mid-21st century. China may add another half-billion people as "its attempts to slow down population growth have not been as successful as the government had hoped," Urban says. By 2050, Indonesia may have more people than all of North America.

In Latin America over the same period, Mexico's population is expected to double, and populations may more than double in several nations, including Brazil, Peru, and Venezuela. Like Asia, though, this region (in aggregate) has so far managed to increase its agricultural production and imports more than enough to keep pace with population growth.

Stark Contrast for Food Exporters

Not surprisingly, the population trends in Third World nations stand in stark contrast to those of the more industrialized parts of the world.

Projections for the Soviet Union and Eastern Europe indicate continued growth, but at a moderate and steadily slowing rate. By 2050, population may increase by about one-fourth from today's estimated 426 million for the USSR and Eastern Europe combined.

Western Europe's population—now estimated at 357 million—is expected to peak around the turn of the century and then decline slowly. The same is true for Japan.

In the United States and Canada, populations may continue to inch upward for the next few decades and then level off. In all likelihood, a very gradual downtrend will have begun by the middle of the next century (when the combined U.S.-Canadian population is expected to surpass Western Europe's).

For food-surplus nations generally, these projections suggest slowly growing or declining populations over the next 60 years.

The most rapid growth will continue to be found in the poorer parts of the world, where food deficits are already large and where imports are being held down by stagnant economies, subsistence incomes, large national debts, and unfavorable trade balances.

"In many of these areas, the need for food will increase dramatically, but the ability to buy food from exporting nations, like the United States, will fall far short of the need," Urban says.

"These countries will require very substantial, long-term assistance," he adds. "In my judgment, that assistance will have to include food aid and debt relief. It must also include economic and agricultural development aid to increase their production and trade, and to improve their incomes so they can buy the food they can't produce."

If incomes remain at subsistence levels, he cautions, many Third World nations will find it increasingly difficult to feed their populations, and much of the production capacity of the food-exporting nations will stand idle.

On the other hand, accelerated development and higher incomes should help poorer nations provide for their own people while, at the same time, opening up new trade opportunities—opportunities, according to Urban, for agriculture here and abroad to fill an already huge and growing latent demand for better diets as world population expands. □

[Based primarily on information provided by economist Francis Urban of the Agriculture and Trade Analysis Division, Economic Research Service.]

Sugar Consumption Shows an Increase

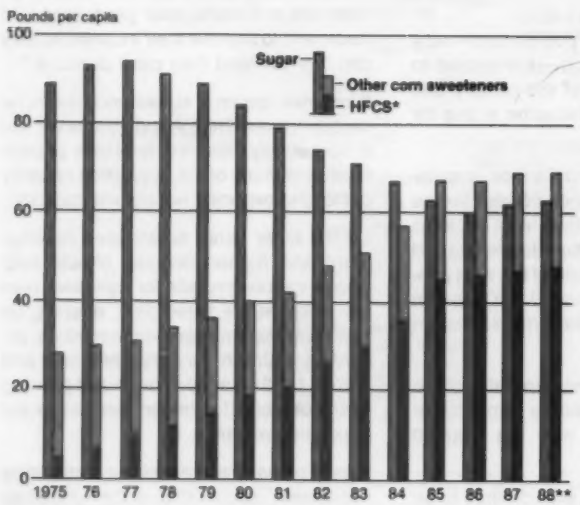
After more than a decade of declining U.S. use, sugar may now be in a position to hold its own against rival sweeteners.

In 1987, for the first year in 12, Americans used more sugar, instead of less. Per capita consumption was up a little over 3 percent, to 62.2 pounds. Sugar deliveries to the food and beverage industries, and wholesale and retail markets, rose 5 percent from 1986 to a little over 7.6 million tons (refined). Consumption of all sweeteners, caloric and noncaloric, also rose 3 percent to 152.4 pounds per capita.

Economist Robert Barry of USDA's Economic Research Service attributes the increase in deliveries of sugar to the fact that U.S. population and per capita income have increased. "More important," says Barry, "after more than a decade of seizing markets from sugar in such diverse products as beverages, baked goods, jams, and other processed foods, the cheaper-to-produce high fructose corn syrup (HFCS) has come close to reaching its technical limit of substitutability. This has staunched the dramatic losses of sugar in the past 12 years. Of course, there is the possibility of a technical breakthrough—possibly lower cost forms of dry fructose or low-calorie sweeteners. Much depends on whether sugar will continue to be supported at current price levels, which encourage the development of substitute sweeteners."

The sugar industry had been threatened by rival sweeteners for many years with no major losses. Then, beginning around 1975, HFCS started to emerge as sugar's major rival. The price of sugar had soared, and HFCS was cheaper to produce, an advantage that HFCS still retains.

U.S. Consumption of Corn Sweeteners Has Exceeded Sugar Since 1985



*Dry basis. **Forecast.

In 1975 the beverage industry was sugar's largest single market, using 25 percent of the total sugar available. By 1987, this figure had dropped to 3 percent because of the industry's switch to HFCS and the increased demand for diet drinks which use noncaloric sweeteners. Sugar deliveries to the beverage industry fell from 2 million short tons in 1975 to 212,000 tons (refined) in 1987.

But in other industrial uses, sugar and HFCS are not always interchangeable. For instance, sugar deliveries to bakery and cereal industries were up to 1.5 million tons in 1987 from 1.2 million tons in 1975. In 1987 bakery and cereal took 5.6 percent more sugar than in 1986. The figure would have been higher except that some parts of this industry had converted to the cheaper HFCS where sugar's browning and other characteristics are not required.

Some markets have developed to take advantage of HFCS's special characteristics. For instance, the soft cookie market uses HFCS's ability to attract moisture.

Candy makers increased their use of sugar by 9.1 percent over 1986. Sugar has not been replaced by HFCS in candy to the same extent as in other products because HFCS's liquid characteristic is much less adaptable to candy use.

The use of sugar in dairy products and canned and processed foods grew only slightly in 1987 and is just a little below the 1975 level. Analysts say that consumption of ice cream, which is the major dairy use for sugar, has not expanded much, despite the popularity of premium ice creams.

U.S. production and yields of sugarcane and sugar beets are keeping up with the increase in

consumption. ERS economists are calling 1987 a year of "extraordinary yields" as they report that U.S. beet and cane sugar output was up 16.3 percent to 7.3 million tons (raw value). Almost all of the sugar-growing regions had record-breaking yields and production.

The U.S. sugar beet crop for 1987/88 is estimated at a near-record of 28 million tons, 11 percent larger than 1986/87 and the fifth consecutive year of increase. Analysts say that the larger crop was due to favorable early planting conditions, adequate rainfall, and abundant sunshine later in the growing season.

The unusually good growing and harvesting conditions, and increased acreage, in combination with higher-yielding varieties of beets and improved methods of extracting sugar, boosted the amount of refined sugar produced from sugar beets. The 1987/88 estimate is 3.96 million tons, raw value, almost reaching the 1975/76 record of 4 million tons.

Domestic cane sugar production in 1987/88 was estimated in January of this year at a record

of nearly 3.4 million tons (raw value). Harvested area of sugarcane for processing into sugar was up 4.6 percent from 1986/87.

Quota imports were down 43 percent from the previous year to the lowest level in this century. "Very low world prices have forced the United States to impose restrictive quotas to defend the U.S. program," Barry says. As a result, only 1 million tons of sugar used in calendar 1987 came from imports.

"Despite recent strengthening," the analyst says, "the May world sugar price is 9 cents a pound, or less than half the U.S. program's Market Stabilization (target) Price of 21.76 cents a pound, raw value."

The new import quota for January 1 to December 31, 1988, was set at 757,880 tons, down 24 percent from 1987 and 75 percent from 1984. Analysts explain that the large rise in the projected 1988 domestic sugar production exceeds the anticipated increase in sugar consumption, so that less imports are required.

Analysts suggest that the quota sugar imports of the next 3 years could range between 500,000 and about 1 million tons a year, depending largely on U.S. production prospects. Dry weather in the western United States could reduce beet sugar production in 1988.

"The U.S. sugar support program, which has encouraged U.S. production, has been criticized by exporting countries as being protectionist and depressing the world price of sugar," says Barry. He adds that pending legislation would lower support levels and, as a consequence, reduce U.S. sugar production and increase imports.

"Another initiative by the Administration seeks to liberalize trade through the Multilateral Trade Negotiations (MTN) of the General Agreement on Tariffs and Trade. The goal is to eliminate trade-distorting subsidies and allow better market access for sugar worldwide," the analyst says. A freer market could reduce sugar prices for American consumers, but it is also likely to reduce the size of the U.S. sugar industry.

Pace of Farm Exports Still Accelerating

Last fall, USDA analysts predicted that U.S. agricultural exports would continue to improve in fiscal 1988, but the good news keeps getting better. In their latest projections, Department analysts made further upward revisions in both their export value and volume forecasts.

U.S. farm exports are now expected to total $33.5 billion, up $5.6 billion or 20 percent from fiscal 1987's figure. Volume may reach about 145.5 million metric tons—the largest tonnage since 1982.

With agricultural imports forecast at about $21 billion, America's farm trade surplus would climb to its highest level in 4 years.

A substantial upturn in grain sales volume and higher U.S. prices for grains, oilseeds, and cotton are boosting export earnings, according to economist Steve MacDonald of USDA's Economic Research Service. Grain volume, he says, is rising for a number of reasons, including the cheaper dollar, the Export Enhancement Program, tighter supplies in other exporting nations, and competitive U.S. prices.

Shipments of corn may increase 4 million tons above last year's 39 million. Wheat exports are expected to jump nearly 11 million tons—38 percent—from fiscal 1987's 28 million. MacDonald says Soviet purchases of U.S. wheat are already at the highest level of any fiscal year to date, and India has bought about 1 million tons.

The total value of U.S. grain and feed exports is forecast at nearly $12 billion, up from $9 billion. Earnings from oilseeds and products may climb from $6.5 billion to $7.7 billion. Sales of U.S. livestock, poultry, and dairy products are likely to set a record, estimated at $5.6 billion.

Overall, sales of U.S. farm products to most major regions are on the rise, with increases to the European Community, Japan, South Korea, the Soviet Union, China, India, the Middle East, Latin America, and Canada.

Based on preliminary forecasts, Soviet purchases may more than double from $659 million in fiscal 1987 to around $1.7 billion this year. Sales to Japan may climb to $6.6 billion, up from $5.6 billion. China may buy half a billion dollars worth of U.S farm products, up from $234 million. The European Community's purchases may rise to over $7 billion, and South Korea's from $1.7 billion to $2.1 billion.

So far, the recovery in U.S. agricultural exports seems to be proceeding more rapidly than expected, says MacDonald. The record year for export volume was fiscal 1980, when shipments totaled 163.5 million tons. By 1986, volume had slumped to only 109.5 million tons. If the forecast for fiscal 1988 proves accurate, two-thirds of the 1980-86 decline will have been recouped in 2 years.

U.S. Agricultural Exports Are Forecast To Rise Around 20% in Value, 13% in Volume, This Year

	Fiscal years[1]								
	1980	1981	1982	1983	1984	1985	1986	1987	1988[2]
	billions of dollars								
U.S. ag exports	40.5	43.8	36.1	34.8	38.0	31.2	26.3	27.9	33.5
U.S. ag imports	17.3	17.2	15.5	16.4	18.9	19.7	20.9	20.6	21.0
Trade surplus	23.2	26.6	23.6	18.4	19.1	11.5	5.4	7.3	12.5
	millions of tons								
Export volume	163.5	162.0	157.9	144.8	143.6	125.8	109.5	129.2	145.5

[1]Fiscal years begin October 1 of prior year and end September 30 of year shown. [2]USDA forecast as of May 26, 1988.

Part-Time Farmers Like It That Way

Very few operators of small, part-time farms in four counties of east-central Oklahoma are interested in becoming full-time farmers—apparently because it's easier to support their families by relying mainly on off-farm jobs.

Farms in the four counties were the focus of a recent study by economists Scott Sanford of USDA's Economic Research Service and Luther Tweeten of Ohio State University.

The questions the researchers sought to answer included:

1. Can small, part-time farming operations be transformed into conventional full-time farms while maintaining or increasing total family income?

2. Can families on small farms, producing traditional commodities efficiently, earn incomes comparable to their county averages?

3. Can typical small, full-time farms producing traditional commodities but earning below poverty-level incomes raise their incomes above the poverty level by expanding acreage and farming more efficiently?

"No" was found to be the answer, generally, to all three questions.

To turn a small, part-time farm into a full-time operation takes more than additional land and efficient production methods, Sanford says. Significant investment capital is also likely to be needed, plus possibly a change in the commodities produced, and maybe some family sacrifices, such as reduced spending on consumer products.

The study did find that the income on poverty-level farms could be raised by growing labor-intensive specialty crops. But few of the farmers, poverty-level or otherwise, were willing to try to learn to produce alternative crops. Sanford says that only about 5 percent of the small farm operators and part-time farmers in the study expressed interest in seeking to increase their farm income by growing specialty crops.

Sanford and Tweeten were at Oklahoma State University when this research was begun in the early 1980's. The authors say that although the study covered just one area of Oklahoma, that area has characteristics similar to much of the southeastern United States. Therefore, they say, the study can be a useful source of information about opportunities for part-time farmers, operators of small farms, and poverty-level farming in other locations as well. The study also could be helpful to government policymakers, the researchers say.

The study was concerned with potential for growth over time. The researchers made use of production budgets for farms of various sizes and types, with different levels of labor input.

"One of the surprising findings in this study was how few of the part-time farmers are interested in full-time farming," Sanford says, adding that most of them prefer living on a farm but working primarily off the farm. "Many have farm backgrounds, they enjoy country living, and they believe they are in good places to raise their families." But most are not interested in full-time farming.

Tweeten points out that few farms ever change in size. "Big commercial farms started as big commercial farms. Small farms started as small farms. And seldom do you see any crossover," he says.

Since 1959, the number of part-time farmers in this country has increased significantly. At the same time, the number of small farms with full-time operators has fallen sharply. Part-time farming now constitutes the largest segment of U.S. farms.

Part-time farmers were defined in this study as those working off the farm at least 4 hours per day for 150 or more days a year. Of the 372 farm operations surveyed, 143 (38 percent) were classified as part-time farms, 130 (35 percent) were full-time farms, and the remaining 99 (27 percent) were operated by aged (65 or older) or disabled farmers. Small farms are defined as those with less than $40,000 in annual sales of farm products.

Crops commonly observed in the survey area—including grains, soybeans, hay, pasture, and cattle and calves—were considered to be traditional crops. The "specialty enterprises" evaluated in the study were 14 vegetable crops, including sweet corn, asparagus, green beans, and watermelons.

Sanford says that operators of most small, part-time farms have relatively high off-farm incomes, supplemented by farm income under favorable conditions and capable of absorbing farm losses under adverse conditions. Therefore, they have high farm survivability potential, the economist adds.

"I did not realize," Tweeten comments, "how important off-farm work is to most operators of small farms. They could not survive without it." He said he was also surprised at the amount of off-farm work, with the subjects of this research working an average of more than 40 hours a week at off-farm jobs.

This study suggests that agricultural extension programs should consider the farm family as an earning unit for which farm income may not be the dominant component.

"Economic development of rural areas, not just better farm management, provides the best opportunity for operators of small farms to improve their situations," Sanford says.

Loss of Insecticide Would Affect Cotton

In coming seasons, cotton producers may have to adapt to the loss of one, or more, of the most effective insecticides now available for controlling the crop's two most damaging insect pests—cotton bollworms and tobacco budworms.

Currently, these insects are controlled primarily with pyrethroids and chlordimeform. While the EPA was reviewing chlordimeform (trade names Galecron and Fundal) based on findings that it causes cancer in laboratory mice and is toxic to fish and wildlife, the manufacturers announced that they would pull the chemical from the market after the 1988 season.

When used alone, pyrethroids may lose their effectiveness, although it is not known how quickly this might occur.

This report examines the economic implications for producers, consumers, and society at large under two scenarios: the loss of chlordimeform, assuming pyrethroids remain effective; and the loss of both chemicals, assuming pyrethroids become ineffective against pests and effective alternatives are not available.

Econometric projections under the first scenario suggest that cotton production could fall about 8 percent, and prices might rise by 7 cents a pound. Cotton acreage would decline about 5 percent nationwide, but more than 60 percent in the Southeast.

The projected effects would be much greater under the second scenario.

Under both scenarios, those cotton producers not dependent on the affected pesticides (particularly farmers in California and the drier parts of the Southern Plains) would benefit from the reduced U.S. production and higher prices. Other producers generally would lose, but the major losers would be consumers. In each case, the net economic effect is a loss. No attempt was made to estimate the health and environmental impacts of removing chlordimeform from the market.

Losing Chlordimeform Use in Cotton Production: Its Effects on the Economy and Pest Resistance *by Craig Osteen and Luis Suguiyama. (Published May 1988; 26 pages of text and data tables; GPO Stock No. 001-019-00580-7; $1.75.)*

Farm Trade List Lengthy, Varied

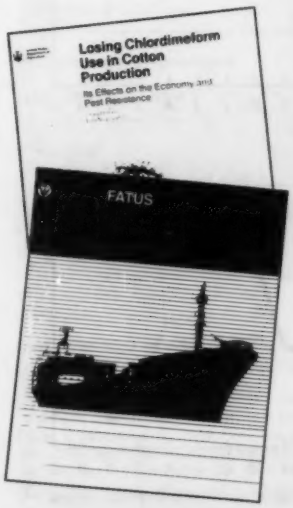
Although grains and oilseeds dominate U.S. agricultural exports, foreign markets also take a wide variety of other products that originate on America's farms.

In fiscal 1987, for example, U.S. shipments included 1,085 live hogs to Indonesia, 60,401 metric tons of beef to Brazil, nearly 35,000 tons of horsemeat to Western Europe, more than a million baby chicks to the Dominican Republic, 401,207 mink pelts to Switzerland, 276,605 tons of cotton to South Korea, 82,121 tons of frozen potatoes and 6,739 tons of popcorn to Japan, 24,196 tons of almonds to West Germany, and 44,001 tons of fresh apples to Taiwan.

Similarly, U.S. imports of farm products extend far beyond coffee, cocoa, bananas, and Mexican vegetables. For instance, fiscal 1987 imports included 476,872 tons of rubber from Indonesia, 1.2 million head of cattle from Mexico, 6,191 tons of feathers and down from China, 11,387 tons of cheese from Denmark, 2,984 tons of sheepskins from New Zealand, 23,649 tons of cashews from India, and 67,455 tons of olives from Spain.

This statistical report provides reference data on U.S. agricultural exports and imports for fiscal years 1986 and 1987 and, in some cases, for prior years. Tables show both value and quantity data by commodity and country.

Foreign Agricultural Trade of the United States, Fiscal Year 1987 Supplement. *(Published May 1988; 377 pages of tabular data; GPO Stock No. 701-026-00027-6; $11.00.)*



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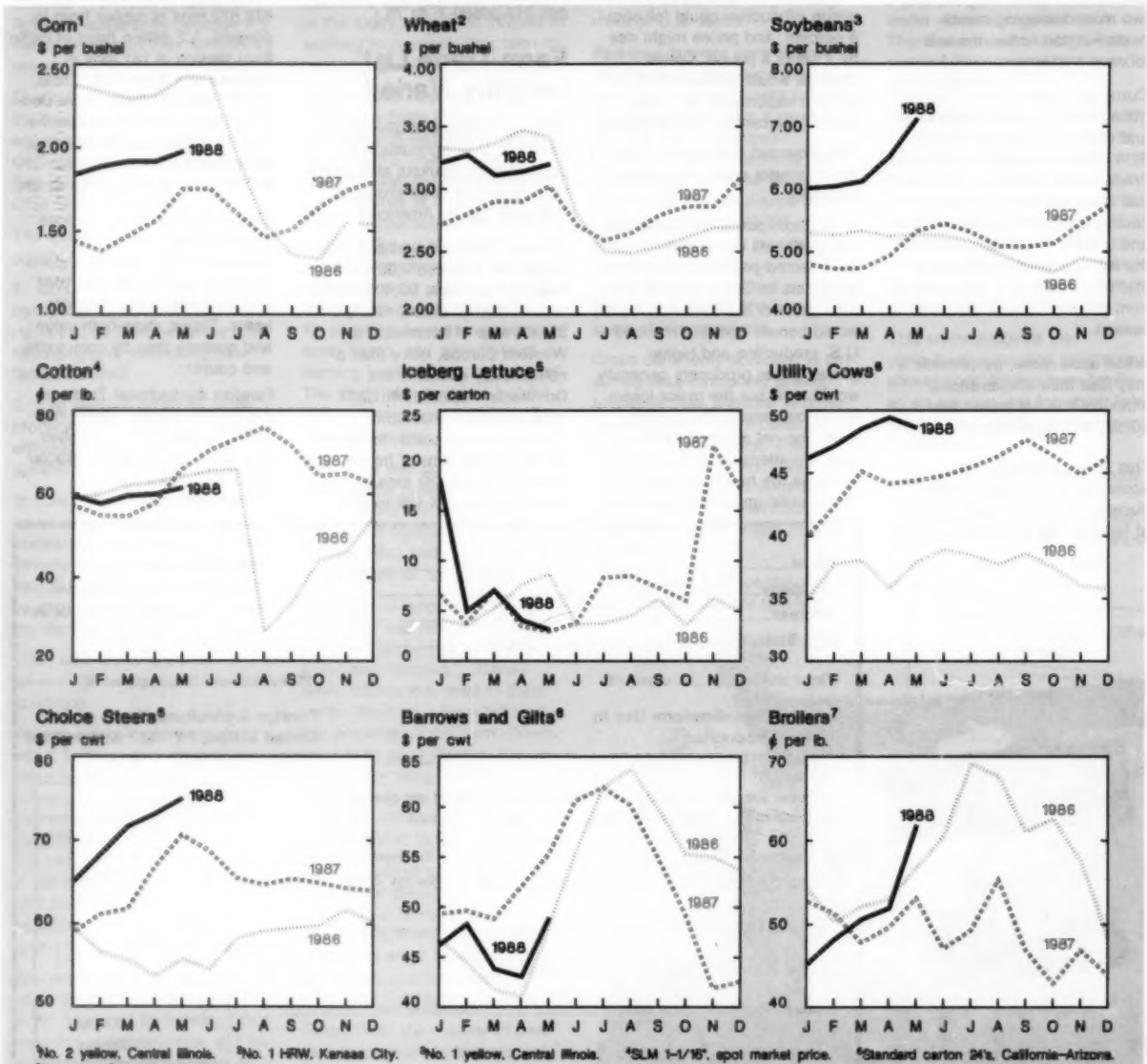
FARMLINE TRENDS

Monthly Price Monitor

USDA's May 1988 index of farm prices increased 3% from April and was 4.7% above its year-earlier level. Corn rose to $1.98 per bushel, up 6¢ from April and the highest price since June 1986. Wheat, too, gained 6¢, reaching $3.20. Soybeans jumped 60¢ to $7.12 per bushel—the highest since June 1984. Cotton rose to 61.6¢ per lb., while lettuce sagged to $3.13 per carton, its lowest price in 12 months. In the meat animals area, utility cows eased back to $48.58 per cwt, but choice steers topped $75, exceeding the previous record price of April 1979. Barrows and gilts rose $5.85 to $48.96 per cwt, and broilers shot up 10¢ per lb. to 61.8¢, the highest since October 1986. All prices shown are monthly averages.



[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1-1/16", spot market price. [5]Standard carton 24's, California–Arizona. [6]Omaha. [7]Wholesale, New York.

Leading Markets for U.S. Agricultural Exports
Fiscal 1987[1]

	1st	2nd	3rd	4th	5th	6th	7th	8th
	U.S. exports, in $ millions (000,000)							
All U.S. ag products U.S. total: $27.9 billion	Japan 5,553	*Netherlands[2] 1,950	Canada 1,776	South Korea 1,693	Taiwan 1,354	*West Germany 1,286	Mexico 1,215	Egypt 761
Soybeans & products U.S. total: $5.7 billion	*Netherlands[2] 892	Japan 836	*West Germany 464	Taiwan 400	*Spain 378	*Italy 292	Mexico 248	South Korea 232
Feed grains & products U.S. total: $3.8 billion	Japan 1,159	Mexico 337	South Korea 314	Taiwan 313	USSR 280	Saudi Arabia 221	Egypt 163	Brazil 94
Wheat & products U.S. total: $3.1 billion	Japan 353	USSR 325	Egypt 311	South Korea 206	Algeria 134	Morocco 130	Taiwan 110	Iraq 104
Hides & skins U.S. total: $1.7 billion	South Korea 552	Japan 356	Taiwan 178	Canada 139	*Italy 66	Mexico 61	*West Germany 54	Switzerland 29
Live animals & meat[3] U.S. total: $1.6 billion	Japan 765	*France 117	Canada 112	*United Kingdom 109	Brazil 66	Mexico 64	*Ireland 47	New Zealand 37
Feeds & fodders U.S. total: $1.5 billion	*Netherlands[2] 588	Japan 237	*West Germany 143	*Portugal 60	Canada 59	*Spain 57	*Italy 47	*France 45
Cotton & linters U.S. total: $1.4 billion	Japan 345	South Korea 282	Taiwan 140	*West Germany 82	Indonesia 73	*Italy 62	Thailand 46	Philippines 31
Fruits & preparations U.S. total: $1.3 billion	Japan 392	Canada 265	Hong Kong 125	Taiwan 83	*United Kingdom 56	*Netherlands[2] 47	*France 44	*West Germany 44
Unmanufactured tobacco U.S. total: $1.2 billion	Japan 319	*West Germany 194	*Netherlands[2] 77	Egypt 74	*Italy 49	*United Kingdom 41	Hong Kong 4	*Spain 4
Vegetables & preparations U.S. total: $1.2 billion	Canada 278	Japan 186	Mexico 103	*United Kingdom 87	Bahamas 60	Hong Kong 33	*West Germany 26	Netherlands Antilles 23
Tree nuts U.S. total: $606 million	*West Germany 125	Japan 117	*France 40	*United Kingdom 36	Canada 34	*Netherlands[2] 22	Sweden 21	USSR 20
Poultry & products U.S. total: $594 million	Japan 142	Canada 75	Hong Kong 58	Iraq 46	Egypt 35	Singapore 30	Mexico 20	South Korea 18
Rice U.S. total: $551 million	Iraq 122	Saudi Arabia 72	*Belgium-Luxembourg 33	Haiti 28	Canada 24	South Africa 19	Guinea 15	*Netherlands[2] 14

*Nations with asterisks are members of the European Community (EC). Altogether, the twelve member-nations of the EC imported $6.8 billion worth of U.S. agricultural products in fiscal 1987. Ranked as a single entity, the EC is the largest market for U.S. agricultural products and also leads in several of the commodity categories above.

[1]Oct. 1, 1986-Sept. 30, 1987. Data include exports under concessional programs, such as P.L. 480. [2]Netherlands is a major transshipment port for products destined for other countries. Because complete data on destinations are not available, the figures for the Netherlands have not been adjusted to reallocate these transshipments to the countries actually receiving the products. [3]Excludes poultry.

Data were provided by economist Cecil Davison of the Commodity Economics Division, Economic Research Service.

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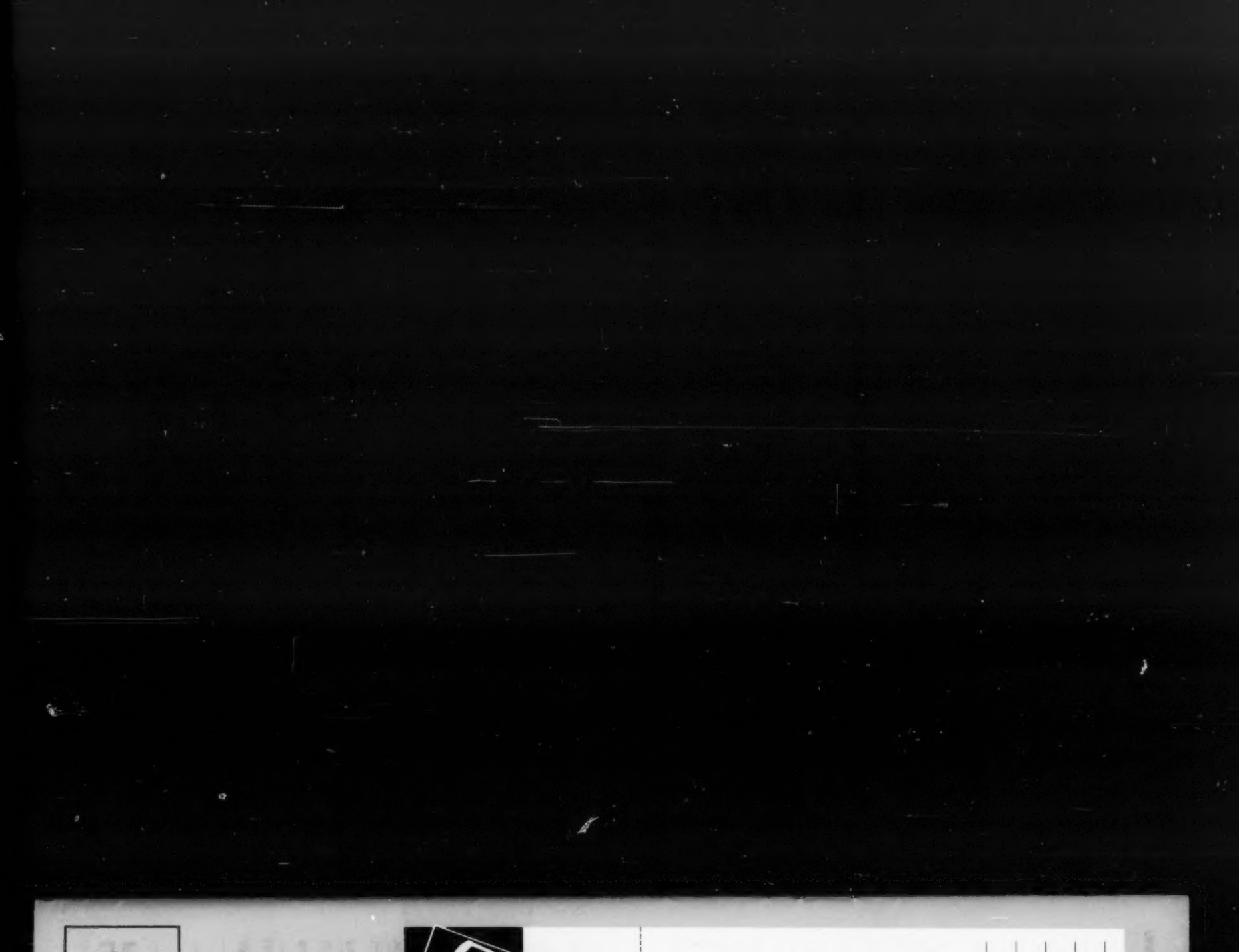
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